### U.S. Department of the Interior • U.S. Geological Survey

## MINERAL INDUSTRY SURVEYS

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#### **ANTIMONY IN THE FIRST QUARTER 1997**

Prices for most forms of antimony fluctuated somewhat the first quarter of 1997. The New York dealer price for antimony metal, published by Platt's Metals Week, was \$0.90 to \$0.95 per pound at the beginning of the quarter and \$1.05 to \$1.12 per pound at the end of the quarter.

The price of high-tint antimony trioxide, published by American Metal Market, started the quarter at \$1.60 to \$1.80 per pound and ended the quarter at \$1.30 to \$1.45 per pound.

The price for clean antimony sulfide concentrate, published by Metal Bulletin, started the quarter at \$19.00 to \$20.00 per metric ton unit and ended the quarter at \$18.50 to \$19.50 per metric ton unit. The price for lump antimony sulfide ore (60% antimony content) began the quarter at \$20.00 to \$21.00 per metric ton unit and finished the quarter at \$19.50 to \$20.50 per metric ton unit.

In Canada, Roycefield Resources Ltd. reported that it was on schedule with the development of its new antimony mine and mill in central Newfoundland, near Gander. Annual mine output is expected to be about 4,500 metric tons of contained antimony, or 5% of world production. Roycefield officials expected that the mill would be operational by late summer, 1997. Mining and milling expenditures were estimated at about \$16 million, with an extra \$10 million being targeted to bring a new plant on stream to produce antimony trioxide. Executives explained that they were developing a new process to make antimony trioxide that would require pilot plant testing prior to commercial production. Roycefield's ore reserves are estimated at more than 1 million tons, grading 4.3% antimony. Officials projected a mine life of 13 years, with about 100,000 tons of ore being mined annually (Metal Bulletin, 1997).

#### **References Cited**

Metal Bulletin, 1997, Roycefield Mine on schedule: Metal Bulletin, no. 8170, April 17, p. 10.

## TABLE 1 SALIENT ANTIMONY STATISTICS 1/

#### (Metric tons, antimony content)

199	1997		
Total p/	Fourth quarter	First quarter	
25,700	6,990 r/	6,170	
NA	NA	NA	
37,600	8,970	7,620 4/	
1,000	193	167 4/	
18,300	4,760	3,250 4/	
18,300	4,020	4,200 4/	
5,270	1,130	811 4/	
462	95	151 4/	
4,810	1,030	660 4/	
13,100 r/	3,370 r/	3,040	
146.58	108.90	100.71	
XX	11,200	11,200	
	Total p/  25,700  NA  37,600  1,000  18,300  18,300  5,270  462  4,810  13,100 r/  146.58	25,700 6,990 r/  NA NA 37,600 8,970 1,000 193 18,300 4,760 18,300 4,020 5,270 1,130 462 95 4,810 1,030 13,100 r/ 3,370 r/ 146.58 108.90	

- p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.
- 1/ Data are rounded to three significant digits, except prices.
- 2/ Nearly all smelter output is trioxide.
- 3/ Data under review.
- 4/ Data for January and February only.
- 5/ Antimony content is calculated by the U.S. Geological Survey.
- 6/ New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.
- 7/ Producer and consumer stocks.

TABLE 2 INDUSTRY STOCKS OF PRIMARY ANTIMONY IN THE UNITED STATES 1/ 2/

#### (Metric tons, antimony content)

	1996	1997 First quarter	
Type of material	Fourth quarter p/		
Metal	3,510 r/	4,270	
Oxide	4,280 r/	3,570	
Other 3/	3,360	3,340	
Total	11,200 r/	11,200	

p/ Preliminary. r/ Revised.

 ${\bf TABLE~3} \\ {\bf INDUSTRIAL~CONSUMPTION~OF~PRIMARY~ANTIMONY~1/~2/} \\$ 

#### (Metric tons, antimony content)

	1996		1997	
Class of material consumed	Total p/	Fourth quarter r/	First quarter	
Metal	1,990 r/	486	490	
Oxide	11,100 r/	2,880	2,540	
Other 3/	22	4	5	
Total	13,100 r/	3,370	3,040	

p/ Preliminary. r/ Revised.

 $<sup>1/\,\</sup>mbox{Data}$  are rounded to three significant digits; may not add to totals shown.

<sup>2/</sup> Estimated 100% coverage based on reports from respondents who held 96% of the total stocks of antimony at the end of 1995.

<sup>3/</sup> Includes ore and concentrate, sulfide, and residues.

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

 $<sup>2/\</sup>operatorname{Estimated}$  100% coverage based on reports from respondents who consumed 84% of the total antimony in 1995.

<sup>3/</sup> Includes sulfide and residues.

# TABLE 4 INDUSTRIAL CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL PRODUCED 1/ 2/

#### (Metric tons, antimony content)

		1997		
Product	Total p/ r/	Fourth quarter r/	First quarter	
Metal products:				
Antimonial lead	1,140	288	246	
Other 3/	1,160	277	332	
Total metal products	2,300	565	579	
Nonmetal products:				
Ceramics and glass	898	213	122	
Other 4/	1,090	227	260	
Total nonmetal products	1,990	440	382	
Flame-retardants:				
Plastics	6,220	1,680	1,440	
Other 5/	421	111	125	
Total flame retardants	6,640	1,800	1,570	
Total reported	10,900	2,800	2,530	
Full industry totals 2/	13,100	3,370	3,040	

p/ Preliminary. r/ Revised.

- 1/ Data are rounded to three significant digits; may not add to totals shown.
- $2/\operatorname{Estimated}$  100% coverage based on reports from respondents who consumed 84% of the total antimony in 1995.
- 3/ Includes ammunition, bearing metal and bearings, cable coverings, castings, sheet and pipe and solder.
- 4/ Includes ammunition primers, pigments, and plastics.
- 5/ Includes adhesives, rubber and textiles.

 ${\bf TABLE~5} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~ANTIMONY,~BY~COUNTRY~1/}$ 

#### (Metric tons, antimony content)

	199	1996		1997		
Country	Total p/	Fourth quarter	January	February	JanFeb.	
Ore and concentrate:	-	-				
Bolivia	222	99				
China	473	37	80	60	140	
Other	310 r	57	9	18	28	
Total	1,000	193	89	78	167	
Metal:						
Bolivia	153			2	2	
China	13,500	4,380	1,700	979	2,680	
Hong Kong	1,620	75	99	207	307	
Kyrgyzstan	1,240	61		117	117	
Mexico	1,330	164	28	103	131	
Other	421	82	2	7	10	
Total	18,300	4,760	1,830	1,420	3,250	
Oxide:						
Belgium	1,080	366	99	96	195	
Bolivia	2,480	520	373	249	622	
China	7,730	1,280	894	915	1,810	
Mexico	3,150	859	256	201	457	
South Africa	2,860	696		583	583	
Other	1,050	302	253	283	534	
Total	18,300	4,020	1,870	2,330	4,200	
Grand total	37,600	8,970	3,800	3,820	7,620	
Other antimony compounds (gross weight)	63	21		14	14	

p/ Preliminary. r/ Revised.

Source: Bureau of the Census. Antimony content is calculated by the U.S. Geological Survey.

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.